CORRECTED COPY

BY ORDER OF THE
SECRETARY OF THE AIR FORCE

AFMS 38DA
6 December 1996

Manpower Guide

★ *BASE NETWORK CONTROL CENTER (BNCC)*

★This Air Force Manpower Guide (see Note below) quantifies the manpower required to accomplish the tasks described in the process oriented description (POD) for varying levels of workload. The BNCC manages fixed and deployed base-level Command, Control, Communications, and Computer (C4) network support that provides the warfighter and business users the information resources needed to achieve their operational objectives. It is the single focal point for Base Network Management (NM) and problem resolution. The BNCC uses collocated independent NM Systems (NMS), remote support toolsets, and consolidated wing personnel to rapidly respond to a full range of peacetime and wartime operational contingencies. It is the base-level central point of contact for mission C2 and business systems that are part of the base network. It uses remote support toolsets to reduce wing communications unit dispatch for on-site customer support for those systems included in the base network. The BNCC provides fly-away C2 systems and network support for deployed wings and also simultaneously manages C4 systems maintenance for all base users. The BNCC is responsible for maintaining network operations. The BNCC focuses on providing responsive C4 support to the operational commanders it services. This guide applies to all objective wing Base Network Control Centers in ACC, AETC, AFMC, AFSOC, AFSPC, AMC, PACAF, and USAFE, during peacetime operations. It does not apply to the Air National Guard or Air Force Reserve, or to locations where a cost comparison study was conducted (see AFI 38-203, *Commercial Activities Program*). Both a positive and a negative mission variance must be developed for all work within the organization that has undergone a cost comparison study. AFI 33-115, *Network Management*, contains policy and procedural guidance for the BNCC. This guide was developed in accordance with policies and procedures contained in AFMAN 38-208, *Air Force Management Engineering Program (MEP).* Send comments and suggested improvements on AF Form 847, **Recommendation for Change of Publication**, through channels, to AFCQMI/MQBA, 550 E Street East, Randolph AFB, Texas 78150-4451.

***NOTE*:** This document has been approved as a manpower guide, but will be published in a manpower standard format.

★*SUMMARY OF CHANGES*

This Air Force Manpower Guide supersedes AFMSs 38AD and 38AF in their entirety. Both AFMSs, dated 4 November 1994, were rescinded in November 1995. This guide implements format changes to comply with SAF requirements. It also includes minor administrative changes in the overall layout of the guide. The incorrect version of this guide was published 6 December 1996. This corrected copy replaces the previously published guide in its entirety. The revisions to this corrected copy include expanded workload factor data, application instructions, variance definitions, correct AFSCs in the Standard Manpower Table, and the arrangement of the POD. It also changes the name of the FOA from Air Force Management Engineering Agency (AFMEA) to Air Force Center for Quality and Management Innovation (AFCQMI). Changes are identified with a star (★).

1. Core Composition. The following factors were considered to determine the core manpower required for the BNCC:

Supersedes AFMSs 38AD and 38AF, 4 November 1994 (Rescinded November 1995)
Certified by: AFCQMI/MQB (Lt Col Joan Buss)
OPR: AFCQMI/MQBA (MSgt James Elliott)
Pages: 15/Distribution: F

1.1. An objective wing with a base population of 3055 assigned personnel and 72 Primary Aircraft Inventory. To support this mission, a BNCC with the capability to support 2000 network users and 25 network servers is required.

1.2. The level of service provided to support the wing is 24 hours per day, 7 days per week, for the Help Desk (HD) and Information Protection operations and 8 hours per day, 5 days per week, for the Network Management (NM) functions. NM includes centralized network systems administration and configuration, fault, performance, and accounting management functions. NM personnel are subject to on-call/standby recall for contingencies or unscheduled outages. Help Desks that operate less than 24 hours per day, 7 days per week are required to submit a negative variance to adjust manpower requirements.

1.3. The BNCC serves as a single point-of-contact for problem resolution and service for communication-computer network customers. It is comprised of, but not limited to, the hardware, software, and functions listed below:

1.3.1. **Hardware:**
1.3.1.1 Consists of specific hardware platforms centrally supporting wide area networks, base-level enterprise networks, local area networks, and Theater Battle Management (TBM) systems (Defense Information Systems Network (DISN), Information Protection, TBM systems such as Command and Control Information Processing System (C2IPS), Contingency Theater Automated Planning System (CTAPS), Wing Command and Control System (WCCS), Air Force Mission Support System (AFMSS).
1.3.1.2. Peripheral devices such as off- and on-line high-speed printers, plotters, scanners, and facsimile systems.
1.3.1.3. Strategically distributed transport equipment such as routers, bridges, hubs, media distribution panels.
1.3.2. **Software:**
1.3.2.1. Integrated software application programs including network management and trouble ticketing software, operating systems, information protection monitoring and intrusive security testing systems, and remote support toolsets.
1.3.3. **Functions:**
1.3.3.1. Help Desk single point of contact and dispatch for stand-alone and network customer support services for client/server systems, electronic mail hosts, gateways, and file servers.
1.3.3.2. Performs network management and network administration for customers connected to a network supported by the BNCC. Level of service less than 100 percent are provided to customers as stated in memorandum of agreement (MOA) or memorandum of understanding (MOU).
1.3.3.3. Operates precision test equipment such as network analyzer, protocol analyzer, bit error rate test set, optical time domain reflectometer, signal generator, analog level measuring set, and volt/ohm meter.
1.3.3.4. Performs node site coordinator duty for DISN Non-classified Internet Protocol Router Network (NIPRNET), Secret Internet Protocol Router Network (SIPRNET), and Air Force Concentrator.

1.4. The following processes are not performed by the core BNCC:
1.4.1. Telecommunications Center Operations.
1.4.2. Deployable Network Operations (see Attachment 3, paragraph A3.1. for variance).
1.4.3. Dedicated, daily server administration for functional LANs and Theater Battle Management (TBM) systems. Server administrators and TBM system administrators (SA) provide dedicated customer support for a specific LAN or TBM system. SA's area of responsibility includes the user's terminal to the server, but most often does not include the network backbone infrastructure. SAs ensure servers, workstations, peripherals, communication devices, and software are on-line and available to support customers (e.g., file systems management, modifing user profiles, workstation and application set-up, and password control). AFCA is currently collecting source data for these processes. Data analysis is being performed to validate these variances.

1.5. Core Manpower Required. 22*

NOTE: See the application instructions in paragraph 4.3 below to determine Information Protection staffing levels to add to the core manpower required in 1.5.

1.6. Core Range. 14 - 119.

2. Core Composition Variables. Increased base population is assumed to drive increases in the mission support functions serviced by the BNCC. This increases the number of network devices, applications, servers, and training required.

3. Standard Data:

3.1. **Approval Date.** 28 June 1996

3.2. **Man-hour Data Source.** Workshop

3.3. **Man-hour Equation.** Yc=1857.13 + 0.2498(X1) + 49.211(X2)

3.4. **Workload Factors:**
3.4.1. **Title.** Authorized Network User Terminal.
3.4.1.1. **Definition.** The total number of local computer terminals supporting one or more users (workstation) connected to the base network. BNCC provides a 'level of service' described in the Process Oriented Description at Attachment 1.
★3.4.1.2. **Source.** BNCC network configuration map, and/or a developed database that documents the number of authorized network user terminals supported. Memorandum of agreement (MOA), memorandum of understanding (MOU), and service level agreements (SLA) are source documents that identify the level of service to be provided by BNCC. Do not count terminals (workstations) without an approved MOA/MOU/SLA.
3.4.2. **Title.** Authorized network server.
3.4.2.1. **Definition.** A dedicated network server configured for the primary purpose of providing one or more services described in the Process Oriented Description at Attachment 1. (Print Servers are not authorized to be included in this count.)
★3.4.2.2. **Source.** BNCC network configuration map, and/or a developed database that documents the total number of authorized servers supported. Memorandum of agreement (MOA), memorandum of understanding (MOU), and service level agreements (SLA) are source documents that identify the level of service to be provided by BNCC. Do not count servers without an approved MOA/MOU/SLA.
3.4.3. **Title.** Internet Protocol Address
3.4.3.1. **Definition.** A network device assigned an internet protocol address (i.e., the 32-bit quantity that identifies a network device).
3.4.3.2. **Source.** BNCC maintained Internet Protocol address database.

3.5. **Points of Contact:**
3.5.1. **Lead Technicians.** Capt Carter, CMSgt Galvin, SMSgt Campbell (AFCA/SYNN)
3.5.2. **Functional Representatives.** TSgt Broz (AFCA/SYNN), MSgt Johnson (HQ ACC/SCMN), MSgt Cranford (HQ ACC/SCMN), MSgt Spalding (314CS/SCSN), MSgt Ireland (375 CPSF (BITS)), MSgt Kerr (436CS/SCSN), MSgt Mayfield (37CS/BNCC), SSgt Oldham (82CS/BNCC), SMSgt Dixon (90CS/SCCD), MSgt Hoyt (341CS/SCSR), SMSgt Johnson (HQ AFMC CSO/SCSD), MSgt Whitfield (72CS/SCSN), SrA VanCalcar (76CS/SCSNJ), MSgts Dean and McCorvey (HQ AFSOC/SCMIN), 1Lt Judd (36CS/SCTB), MSgt Kennedy (HQ USAFE/SCMB), MSgt Wilke (82CG/SCNB), TSgt Atkins (HQ AIA ISG/MSS), Capt Cloutier and 1Lt Werner (10 CS/SCS), Mr. Ferro and Mr. Wall (AFIWC/EAC).
3.5.3. **AFCQMI Representative.** MSgt James O. Elliott (AFCQMI/MQBA)

4. Application Instructions:

4.1. **Step 1.** If the BNCC conforms to the core composition description in paragraph 1, the manpower authorized is 22 plus the appropriate information protection operation man-hour adjustment (see paragraph 4.3 below) plus approved variances. If not, apply the manpower equation using the following steps:

★4.1.1. Determine the total number of authorized network user terminals, total not to exceed 20,000. Substitute this total for "X1" in the man-hour equation.
★4.1.2. Determine the total number of authorized network servers, total not to exceed 225. Substitute this total for "X2" in the man-hour equation.
★4.1.3. Calculate Yc.
★4.2. **Step 2. Variances:**
★4.2.1. Calculate variance for core workload. BNCCs that do not accomplish all processes identified in Attachment 4, Process Analysis Summary, must review and calculate adjusted earned man-hours per instructions listed in Attachment 4.
★4.2.2. A BNCC Help Desk that operates less than 24 hours per day, 7 days per week, is required to apply this adjustment to earned man-hours.
★4.2.2.1. Multiply earned man-hours from paragraph 4.1.3 above by 7 percent (i.e, if Yc from paragraph 4.1.3 above is 5000, then 5000 x .07 = 350).
★4.2.2.2. Subtract the result in paragraph 4.2.2.1 above from the earned man-hours in paragraph 4.1.3 above (i.e., 5000 - 350 = 4650 adjusted earned man-hours). Enter the new man-hour total in paragraph 4.1.3 above (e.g., 4650).

4.3. **Step 3.** Determine the man-hours earned for Information Protection operations per matrix below. Add these man-hours to the total man-hours earned in para 4.1.3.

NUMBER OF INTERNET PROTOCOL ADDRESSES	**MAN-HOURS EARNED**
0 - 1500	321.40
1501 - 2500	482.10
2501 - 3500	642.80
3501 or more addresses	803.50

4.4. **Step 4.** Positive Mission Variance Workload. A BNCC that supports a deployable, centralized network mission, add 321.4 man-hours to the total obtained in para 4.1.3 above. Use this new man-hour figure in the following calculations.

4.5. **Step 5.** Divide the total man-hours from 4.4 by the current Man-hour Availability Factor (MAF).

4.6. **Step 6.** Use current rounding rules to determine whole manpower requirements (i.e., round up to the next whole number; 24.23 personnel → 25 personnel).

4.7. **Step 7.** After applying the manpower equation, refer to the manpower table at Attachment 2 to determine the skill and grade distribution for manpower requirement. The Standard Manpower Table is designed to accommodate all known variances, both plus and minus, to the core BNCC.

5. Statement of Conditions. See paragraph 1 above. Details are provided for specific conditions for hours of operation, level of service, etc.

JAMES M. JENKINS, Major, USAF
Chief, Systems Integration and Support Division
AF Center for Quality and Management Innovation

Attachments
1. Process Oriented Description
2. Standard Manpower Table
3. Variances
4. Process Analysis Summary

★ PROCESS ORIENTED DESCRIPTION

BASE NETWORK CONTROL CENTER

A1.1. CONDUCTS BASE NETWORK INFORMATION PROTECTION OPERATION:

A1.1.1 CONDUCTS SECURITY AUDIT. Tests and validates network security using on-line survey. Identifies and maintains base target set for Air Force-owned system for testing. Installs and sets up audit tool and coordinates with the wing or base Information Protection office. Executes all automated script available to test vulnerabilities and executes all vulnerability procedures where no scripts are available (NFS, NIS, cracking password, etc.). On systems accessed, tests configuration for vulnerabilities. Collects data on intrusion activity and intrusion reporting by system administrator and user. Generates report from on-line survey result and distributes to the wing or base Information Protection office. Assists system administrator of targeted system with implementing countermeasure and firewall system. Assists with risk analysis and ensures information system is accredited. Enforces security policy by denying service and/or network connectivity.

A1.1.2 MONITORS AND RESPONDS TO NETWORK INTRUSION. Operates and maintains automated security incident equipment. Conducts daily traffic analysis, identifies and characterizes incident, generates incident report, and forwards up channel. Investigates each item to clarify and resolve suspicious activity. Monitors base network architecture for effective automated security incident activity. Maintains automated security incident historical transaction tape and log. Responds to network security incident and reports IAW AFSSI 5021 (reports classified incident IAW AFI 31-401, *Managing the Information Security Program*).

A1.1.3. PERFORMS SECURITY DAMAGE ASSESSMENT. Determines what data has been read, changed, or destroyed by unauthorized user. Identifies and secures computer system on affected network. Identifies computer where vulnerabilities are exploited. Tests for sign of hacker activity on other network system. Informs system administrator and user on new system security practice to prevent similar occurrence. Briefs incident, and provides technical support as requested.

A1.2. PERFORMS NETWORK MANAGEMENT OPERATION:

A1.2.1. OPERATES BASE NETWORK MANAGEMENT SYSTEM. Assists help desk personnel in categorization, isolation, and resolution of network problem. Performs system diagnostic, sets global alarm threshold and system parameter. Manages routing protocol and base-wide domain name service. Creates and modifies internet protocol address for NMS and manages and distributes address space. Performs minor application enhancement and software metering. Backs up, recovers, and shuts down NMS when required. Formats and partitions hard drive, performs file system management, and maintains boot service. Provides assistance to system administrator when needed. Performs cryptographic equipment updates.

A1.2.2. PERFORMS NETWORK SYSTEMS ADMINISTRATION. Maintains access control of network, adds and removes user, and modifies user profile. Submits template upon activation, registers with the Network Information Center (NIC), and requests terminal access controller (TAC) access user card. Manages the message transfer agent (MTA), the message store, and the directory service agent (DSA). Monitors daily e-mail activity. Creates and updates mail list in the directory. Operates post-regionalization (DRMD-924) DCP-40/50 front-end-processor, coordinates and provides media conversion and provides distributed print management. Monitors difficulty report, heads up messages**,** and system advisory notice. Distributes standard and base-level software release document to user. Maintains electronic bulletin board and world-wide web home page established by the BNCC. Counts and certifies quantity of controlled product and distributes output product. Manages LAN and MAN directories. Adds, removes, and modifies directory service; verifies directory synchronization; and maintains the master database. Performs Air Force Computer Emergency Response Team (AFCERT) directed change. Prepares and maintains system accreditation documentation. Downloads bulletin board information and distributes to host administrator.

A1.2.3 DISTRIBUTES POST-REGIONALIZATION (DRMD-924) OUTPUT PRODUCT. Reviews/breaks down completed product, gathers input material, and returns item to the system analysis area. Counts and certifies quantity of controlled product. Operates decollator to separate carbon from printed product. Reviews product for processing quality, and distributes to appropriate customer bin. Releases product to customer.

A1.3. PERFORMS HELP DESK FUNCTIONS:

A1.3.1. MONITORS NETWORK MANAGEMENT SYSTEMS (NMS): Logs on and off NMS. Performs status checks and acknowledges alarms. Generates NMS reports and maintains operational database. Monitors help desk

e-mail account and voice mail system. Performs ad hoc queries. Coordinates and responds to Air Force and DISA monitoring center direction.
A1.3.2. PROCESSES TROUBLE CALL AND COORDINATES PROBLEM RESOLUTION. Processes and documents customer trouble call. Monitors trouble ticket status, maintains trouble ticket database, and creates trouble ticket status report. Performs fault isolation by validating, isolating, and correcting fault; verifies service restoral with customer.
A1.3.3. PROCESSES SCHEDULED AND AUTHORIZED OUTAGE (AO). Reviews AO to determine base network service impact and coordinates with local user. Prepares and submits AO message, reviews response, and maintains AO schedule. Performs system check after AO is terminated.
A1.3.4. IMPLEMENTS SERVICE RESTORAL PLAN. Authenticates restoral request and implements required action. Verifies service restoration and coordinates completion of restoral plan with appropriate agency.
A1.3.5 Prepares and submits formatted and unformatted report. Verifies and submits AF and DISA required report on work center hazardous condition (HAZCON) and major communication outage to appropriate agency.

A1.4. PROVIDES BASE NETWORK HARDWARE/SOFTWARE INSTALLATION SERVICE.
A1.4.1. PROVIDES BASE NETWORK HARDWARE INSTALLATION. Installs and configures network server, router, hub, bridge, repeater, workstation, peripheral, etc. Tests and documents equipment installation acceptance testing.
A1.4.2. PROVIDES BASE NETWORK SOFTWARE INSTALLATION. Receives and inventories network software. Tests and validates new software application and network operating system. Distributes and installs network software release and updates, and assists customer with software installation and customization. Installs network e-mail package, InfoConnect, and TCP/IP software. Installs and configures simple mail transfer protocol (SMTP) host, relay, and gateway. Reviews site license agreement and removes software from system when no longer required.

A1.5. PERFORMS BASE C4 NETWORK MANAGEMENT PLANNING:
A1.5.1. MAINTAINS BASE NETWORK CHARACTERIZATION AND VALIDATES DISA MINIMUM ESSENTIAL CIRCUIT LISTING (MECL) AND DEFENSE INFORMATION TECHNOLOGY CONTRACTING OFFICE (DITCO) DATABASE PRODUCT. Collates local and long-haul customer telecommunication circuit information. Verifies current network configuration against other agency database and forwards correction as required.
A1.5.2. PROVIDES CONFIGURATION STANDARDIZATION AND INTERFACE ENGINEERING. Reviews project support agreement (PSA) and coordinates correction with appropriate agency. Performs site survey, creates minor installation document, and develops network configuration plan. Coordinates with engineering and installation (E&I) team and/or commercial vendor prior to arrival and prepares facility for installation team. Escorts and assists team chief with installation or upgrade project. Completes DD Form 250, **Material Inspection and Receiving Report**, AF Form 1261, **Command, Control, Communications and Computer Systems Acceptance Certificate**, and E&I critique. Prepares and updates in-station system block diagram and facility equipment listing. Maintains network and facility configuration plan. Prepares network migration and upgrade plan. Coordinates with MAJCOM, Regional Network Support Center, STEM-B, vendor, and/or contracting on network issue. Performs minor network engineering. Evaluates new technology and incorporates upgrade into base network strategic plan. Monitors management information base (MIB) variable. Provides customer advice and recommendation on new system.
A1.5.3. DEVELOPS LOCAL RESTORAL PLAN (LRP) AND CONTINGENCY OPERATION PLAN. Researches and determines requirement for maximum communication during contingency condition. Develops, tests, and documents implementation guideline for base network communication contingency from existing Operations/War Plans.
A1.5.4. PROCESSES NEW REQUIREMENT FOR SERVICE. Performs impact assessment of CSRD, request for service (RFS), telecommunication service request (TSR), status of acquisition message (SAM) and telecommunication service order (TSO). Reviews, logs in, and researches request. Provides technical advice and solution for software, hardware, and network connectivity. Assists in the preparation of AF Form 9, **Request for Purchase**, when required. Creates and maintains circuit layout record, updates facility labeling, completes in-house cross-connect and other minor device-to-demarcation point connection, and coordinates/performs initial test and acceptance on circuit path. Submits in-effect, exception, or delayed service report as required. Develops and maintains network circuit database and network circuit history folder. Establishes circuit and system parameter for non-Defense Communication System (DCS) circuit.

A1.6. MONITORS AND OPTIMIZES NETWORK PERFORMANCE. Utilizes NM performance tools to ensure optimum network operation. Monitors system log, analyzes bandwidth utilization, and sets global parameter.

A1.7. PERFORMS NETWORK/CIRCUIT QUALITY CONTROL (QC) TESTING AND EVALUATION. Generates and updates QC and preventive maintenance inspection (PMI) schedule. Provides, coordinates, and verifies alternate service during QC testing. Coordinates and performs PMI, in-service, and out-of-service QC testing. Coordinates and deactivates alternate service when testing is completed. Analyzes QC performance trend analysis to identify trends or patterns. Generates and analyzes outage reports and submits DD Forms 1368, **Modified Use of Leased Communication Facilities**, when required. Researches, prepares, and submits QC waiver request when necessary. Dispatches to and from user location when required.

A1.8. PROVIDES NETWORK AND SMALL COMPUTER MAINTENANCE SUPPORT. Dispatches to user or system location to troubleshoot system problem. Maintains line replacement unit (LRU) stock level and assists user in ordering replacement LRUs. Provides technical support to network administrator when requested. Maintains electrostatic discharge maintenance area.

A1.9. PERFORMS FEDERAL INFORMATION PROCESSING (FIP) (ADPE) ECO DUTY. Verifies receipt of FIP equipment, performs audit, resolves and reports known discrepancy. Updates Information Processing Management System (IPMS) database as required. Issues and delivers FIP equipment to customer location. Performs initial and annual inventory of FIP equipment, prints and distributes inventory product. Completes annual base-wide recertification by account. Monitors and assists unit computer custodian in ADPE responsibility. Monitors status of report of survey, prepares report of excess equipment and completes paperwork for equipment turn-in. Determines repair cost-effectiveness and submits cost estimate for equipment maintenance. Processes and monitors AF Form 9, maintains software library, and destroys excess commercial software. Issues loaner equipment, sets up and deletes customer account, and provides FIP equipment custodian training.

A1.10. ADMINISTERS CUSTOMER TRAINING PROGRAM. Provides education and training to base computer user. Drafts and forwards customer education letter or handbook, and advertises training availability. Conducts customer training survey. Prepares training outline, course material, and trains instructor. Prepares class schedule, schedules customer for training, configures computer for specific course and conducts customer training class. Conducts evaluation to see if training met customer need. Develops and maintains a base reference library for hardware and software application.

A1.11. PERFORMS CONTRACT MANAGEMENT FOR BASE NETWORK SUPPORT. Determines base-wide requirement for contract maintenance support and submits input to statement of work (SOW). Provides technical advice and guidance to contracting and programming personnel when required. Maintains contract maintenance and warranty database for base network system. Prepares quality assurance surveillance plan (QSAP) and performs contract quality assurance evaluation (QAE).

A1.12. PERFORMS BASE NETWORK BUDGET PLANNING. Develops/submits budget input and requests higher level funding. Monitors base network fund availability and processes IMPAC card for hardware and software purchase.

★ STANDARD MANPOWER TABLE

WORK CENTER/FAC			APPLICABILITY MAN-HOUR RANGE								
Base Network Control Center/38DA			2170-18976								
AIR FORCE SPECIALTY TITLE	**AFSC**	**GRADE**	**MANPOWER REQUIREMENT**								
Comm-Computer Sys Eng	033S3C	LT									
Comm-Computer Sys Supt	3C090/3C291	SMS									
Comm-Computer Sys Ops/Cntl Crftmn	3C071/3C271	MSG	1	1	1	1	1	1	1	1	1
Comm-Computer Sys Ops/Cntl Crftmn	3C071/3C271	TSG	1	1	1	1	1	1	1	1	1
Elec Computer & Switch System Crftmn	*2E271	TSG							1	1	1
Elec Computer & Switch System Jrnymn	*2E251	SSG	1	1	1	1	1	1	1	1	1
Comm-Computer Sys Ops/Cntl Jrnymn	3C051/3C251	SSG	2	2	2	2	3	3	3	3	3
Comm-Computer Sys Ops/Cntl Jrnymn	3C051/3C251	SRA	6	7	8	9	9	10	10	10	11
Comm-Computer Sys Ops/Cntl Apr	3C031/3C251	A1C	3	3	3	3	3	3	3	4	4
TOTAL			14	15	16	17	18	19	20	21	22
AIR FORCE SPECIALTY TITLE	**AFSC**	**GRADE**	**MANPOWER REQUIREMENT**								
Comm-Computer Sys Eng	033S3C	LT									
Comm-Computer Sys Supt	3C090/3C291	SMS									
Comm-Computer Sys Ops/Cntl Crftmn	3C071/3C271	MSG	1	1	1	1	1	1	1	1	1
Comm-Computer Sys Ops/Cntl Jrnymn	3C071/3C271	TSG	1	1	1	1	1	2	2	2	2
Elec Computer & Switch System Crftmn	*2E271	TSG	1	1	1	1	1	1	1	1	1
Elec Computer & Switch System Jrnymn	*2E251	SSG	1	1	1	1	1	1	1	1	1
Comm-Computer Sys Ops/Cntl Jrnymn	3C051/3C251	SSG	4	4	5	5	5	5	6	6	6
Comm-Computer Sys Ops/Cntl Jrnymn	3C051/3C251	SRA	11	11	11	12	12	12	12	13	13
Comm-Computer Sys Ops/Cntl Apr	3C031/3C251	A1C	4	5	5	5	6	6	6	6	7
*AFSC 2E2X1 is only authorized for support of deployable WCS/TBM mission critical computer resources (e.g., Sentinel Byte, Constant Source, WCCS, AFMSS), otherwise replace 2E2X1s in above table with either a 3C0X1 or 3C2X1.											
TOTAL			23	24	25	26	27	28	29	30	31

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★ STANDARD MANPOWER TABLE

WORK CENTER/FAC	APPLICABILITY MAN-HOUR RANGE
Base Network Control Center/38DA	2170-18976

AIR FORCE SPECIALTY TITLE	AFSC	GRADE	MANPOWER REQUIREMENT								
Comm-Computer Sys Eng	033S3C	LT									
Comm-Computer Sys Supt	3C090/3C291	SMS					1	1	1	1	1
Comm-Computer Sys Ops/Cntl Crftmn	3C071/3C271	MSG	1	1	1	1	1	2	2	2	2
Comm-Computer Sys Ops/Cntl Jrnymn	3C071/3C271	TSG	3	3	3	3	3	3	4	4	4
Elec Computer & Switch System Crftmn	*2E271	TSG	1	1	1	1	1	1	1	1	1
Elec Computer & Switch System Jrnymn	*2E251	SSG	2	2	2	2	2	2	2	2	2
Comm-Computer Sys Ops/Cntl Jrnymn	3C051/3C251	SSG	5	6	6	6	6	6	6	6	6
Comm-Computer Sys Ops/Cntl Jrnymn	3C051/3C251	SRA	13	13	14	14	14	14	14	14	15
Comm-Computer Sys Ops/Cntl Apr	3C031/3C251	A1C	7	7	7	8	8	8	8	9	9
TOTAL			32	33	34	35	36	37	38	39	40

AIR FORCE SPECIALTY TITLE	AFSC	GRADE	MANPOWER REQUIREMENT								
Comm-Computer Sys Eng	033S3C	LT		1	1	1	1	1	1	1	1
Comm-Computer Sys Supt	3C090/3C291	SMS	1	1	1	1	1	1	1	1	1
Comm-Computer Sys Ops/Cntl Crftmn	3C071/3C271	MSG	2	2	2	2	2	2	2	2	2
Comm-Computer Sys Ops/Cntl Jrnymn	3C071/3C271	TSG	4	4	4	4	5	5	5	5	5
Elec Computer & Switch System Crftmn	*2E271	TSG	1	1	1	1	1	1	1	1	2
Elec Computer & Switch System Jrnymn	*2E251	SSG	3	3	3	3	3	3	3	3	3
Comm-Computer Sys Ops/Cntl Jrnymn	3C051/3C251	SSG	6	6	6	6	6	6	7	7	7
Comm-Computer Sys Ops/Cntl Jrnymn	3C051/3C251	SRA	15	15	16	16	16	17	17	17	17
Comm-Computer Sys Ops/Cntl Apr	3C031/3C251	A1C	9	9	9	10	10	10	10	11	11

*AFSC 2E2X1 is only authorized for support of deployable WCS/TBM mission critical computer resources (e.g., Sentinel Byte, Constant Source, WCCS, AFMSS), otherwise replace 2E2X1s in above table with either a 3C0X1 or 3C2X1.

TOTAL			41	42	43	44	45	46	47	48	49

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★ STANDARD MANPOWER TABLE

WORK CENTER/FAC			**APPLICABILITY MAN-HOUR RANGE**								
Base Network Control Center/38DA			2170-18976								
AIR FORCE SPECIALTY TITLE	**AFSC**	**GRADE**	**MANPOWER REQUIREMENT**								
Comm-Computer Sys Eng	033S3C	LT	1	1	1	1	1	1	1	1	1
Comm-Computer Sys Supt	3C090/3C291	SMS	1	1	1	1	1	1	1	1	1
Comm-Computer Sys Ops/Cntl Crftmn	3C071/3C271	MSG	2	2	2	2	2	3	3	3	3
Comm-Computer Sys Ops/Cntl Jrnymn	3C071/3C271	TSG	5	5	6	6	6	6	6	7	7
Elec Computer & Switch System Crftmn	*2E271	TSG	2	2	2	2	2	2	2	2	2
Elec Computer & Switch System Jrnymn	*2E251	SSG	3	3	3	3	3	3	3	3	3
Comm-Computer Sys Ops/Cntl Jrnymn	3C051/3C251	SSG	7	8	8	8	8	8	9	9	9
Comm-Computer Sys Ops/Cntl Jrnymn	3C051/3C251	SRA	17	17	17	18	18	18	18	18	19
Comm-Computer Sys Ops/Cntl Apr	3C031/3C251	A1C	12	12	12	12	13	13	13	13	13
TOTAL			50	51	52	53	54	55	56	57	58
AIR FORCE SPECIALTY TITLE	**AFSC**	**GRADE**	**MANPOWER REQUIREMENT**								
Comm-Computer Sys Eng	033S3C	LT	1	1	1	1	1	1	1	1	1
Comm-Computer Sys Ops/Cntl Crftmn	3C090/3C291	SMS	1	1	1	1	1	1	1	1	1
Comm-Computer Sys Ops/Cntl Crftmn	3C071/3C271	MSG	3	3	3	3	3	3	3	3	3
Comm-Computer Sys Ops/Cntl Jrnymn	3C071/3C271	TSG	7	7	7	7	8	8	8	8	8
Elec Computer & Switch System Crftmn	*2E271	TSG	2	2	2	2	2	2	2	2	2
Elec Computer & Switch System Jrnymn	*2E251	SSG	3	3	3	3	3	3	3	3	3
Comm-Computer Sys Ops/Cntl Jrnymn	3C051/3C251	SSG	9	9	9	10	10	10	10	11	12
Comm-Computer Sys Ops/Cntl Jrnymn	3C051/3C251	SRA	19	19	20	20	20	21	21	21	21
Comm-Computer Sys Ops/Cntl Apr	3C031/3C251	A1C	14	15	15	15	15	15	16	16	16
*AFSC 2E2X1 is only authorized for support of deployable WCS/TBM mission critical computer resources (e.g., Sentinel Byte, Constant Source, WCCS, AFMSS), otherwise replace 2E2X1s in above table with either a 3C0X1 or 3C2X1.											
TOTAL			59	60	61	62	63	64	65	66	67

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★ STANDARD MANPOWER TABLE

WORK CENTER/FAC	**APPLICABILITY MAN-HOUR RANGE**
Base Network Control Center/38DA	2170-18976

AIR FORCE SPECIALTY TITLE	**AFSC**	**GRADE**	**MANPOWER REQUIREMENT**								
Comm-Computer Sys Eng	033S3C	LT	1	1	1	1	1	1	1	1	1
Comm-Computer Sys Supt	3C090/3C291	SMS	1	1	1	1	1	1	1	1	1
Comm-Computer Sys Ops/Cntl Crftmn	3C071/3C271	MSG	3	3	3	3	3	3	3	3	3
Comm-Computer Sys Ops/Cntl Jrnymn	3C071/3C271	TSG	9	9	9	9	9	9	9	10	10
Elec Computer & Switch System Crftmn	*2E271	TSG	2	2	2	2	2	2	2	2	2
Elec Computer & Switch System Jrnymn	*2E251	SSG	3	3	3	3	3	3	3	3	3
Comm-Computer Sys Ops/Cntl Jrnymn	3C051/3C251	SSG	12	12	12	13	13	14	14	14	14
Comm-Computer Sys Ops/Cntl Jrnymn	3C051/3C251	SRA	21	22	22	22	23	23	23	23	24
Comm-Computer Sys Ops/Cntl Apr	3C031/3C251	A1C	16	16	17	17	17	17	18	18	18
TOTAL			68	69	70	71	72	73	74	75	76

AIR FORCE SPECIALTY TITLE	**AFSC**	**GRADE**	**MANPOWER REQUIREMENT**								
Comm-Computer Sys Eng	033S3C	CPT	1	1	1	1	1	1	1	1	1
Comm-Computer Sys Supt	3C090/3C291	SMS	1	1	1	1	1	1	1	1	1
Comm-Computer Sys Ops/Cntl Crftmn	3C071/3C271	MSG	3	3	4	4	4	4	4	4	5
Comm-Computer Sys Ops/Cntl Jrnymn	3C071/3C271	TSG	10	10	10	11	11	11	11	12	12
Elec Computer & Switch System Crftmn	*2E271	TSG	2	2	2	2	2	2	2	2	2
Elec Computer & Switch System Jrnymn	*2E251	SSG	3	3	3	3	3	3	3	3	3
Comm-Computer Sys Ops/Cntl Jrnymn	3C051/3C251	SSG	14	15	15	15	15	16	16	16	16
Comm-Computer Sys Ops/Cntl Jrnymn	3C051/3C251	SRA	24	24	24	24	24	24	25	25	25
Comm-Computer Sys Ops/Cntl Apr	3C031/3C251	A1C	19	19	19	19	20	20	20	20	20

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TOTAL			77	78	79	80	81	82	83	84	85

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★ STANDARD MANPOWER TABLE

WORK CENTER/FAC			**APPLICABILITY MAN-HOUR RANGE**								
Base Network Control Center/38DA			2170-18976								
AIR FORCE SPECIALTY TITLE	**AFSC**	**GRADE**	**MANPOWER REQUIREMENT**								
Comm-Computer Sys Eng	033S3C	CPT	1	1	1	1	1	1	1	1	1
Comm-Computer Sys Supt	3C090/3C291	SMS	1	1	1	1	1	1	1	1	1
Comm-Computer Sys Ops/Cntl Crftmn	3C071/3C271	MSG	5	5	5	5	5	5	6	6	6
Comm-Computer Sys Ops/Cntl Jrnymn	3C071/3C271	TSG	12	12	12	13	13	13	13	14	14
Elec Computer & Switch System Crftmn	*2E271	TSG	2	2	2	2	2	2	2	2	2
Elec Computer & Switch System Jrnymn	*2E251	SSG	3	3	3	3	3	3	3	3	3
Comm-Computer Sys Ops/Cntl Jrnymn	3C051/3C251	SSG	17	17	17	17	18	18	18	18	18
Comm-Computer Sys Ops/Cntl Jrnymn	3C051/3C251	SRA	25	25	26	26	26	26	26	26	27
Comm-Computer Sys Ops/Cntl Apr	3C031/3C251	A1C	20	21	21	21	21	22	22	22	22
TOTAL			86	87	88	89	90	91	92	93	94
AIR FORCE SPECIALTY TITLE	**AFSC**	**GRADE**	**MANPOWER REQUIREMENT**								
Comm-Computer Sys Eng	033S3C	CPT	1	1	1	1	1	1	1	1	1
Comm-Computer Sys Supt	3C090/3C291	SMS	1	1	1	1	1	1	1	1	1
Comm-Computer Sys Ops/Cntl Crftmn	3C071/3C271	MSG	6	6	6	6	6	6	6	7	7
Comm-Computer Sys Ops/Cntl Jrnymn	3C071/3C271	TSG	14	14	14	15	15	15	15	15	16
Elec Computer & Switch System Crftmn	*2E271	TSG	2	2	2	2	2	2	2	2	2
Elec Computer & Switch System Jrnymn	*2E251	SSG	3	3	3	3	3	3	3	3	3
Comm-Computer Sys Ops/Cntl Jrnymn	3C051/3C251	SSG	19	19	19	19	19	20	20	20	20
Comm-Computer Sys Ops/Cntl Jrnymn	3C051/3C251	SRA	27	27	28	28	28	28	29	29	29
Comm-Computer Sys Ops/Cntl Apr	3C031/3C251	A1C	22	23	23	23	24	24	24	24	24
*AFSC 2E2X1 is only authorized for support of deployable WCS/TBM mission critical computer resources (e.g., Sentinel Byte, Constant Source, WCCS, AFMSS), otherwise replace 2E2X1s in above table with either a 3C0X1 or 3C2X1.											
TOTAL			95	96	97	98	99	100	101	102	103

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★ STANDARD MANPOWER TABLE

WORK CENTER/FAC	APPLICABILITY MAN-HOUR RANGE
Base Network Control Center/38DA	2170-18976

AIR FORCE SPECIALTY TITLE	AFSC	GRADE	MANPOWER REQUIREMENT								
Comm-Computer Sys Eng	033S3C	CPT	1	1	1	1	1	1	1	1	1
Comm-Computer Sys Supt	3C090/3C291	SMS	1	1	1	1	1	1	1	1	1
Comm-Computer Sys Ops/Cntl Crftmn	3C071/3C271	MSG	7	7	7	7	7	7	7	7	7
Comm-Computer Sys Ops/Cntl Jrnymn	3C071/3C271	TSG	16	16	16	17	17	17	17	18	18
Elec Computer & Switch System Crftmn	*2E271	TSG	2	2	2	2	2	2	2	2	2
Elec Computer & Switch System Jrnymn	*2E251	SSG	3	3	3	3	3	3	3	3	3
Comm-Computer Sys Ops/Cntl Jrnymn	3C051/3C251	SSG	20	20	21	21	21	21	22	22	22
Comm-Computer Sys Ops/Cntl Jrnymn	3C051/3C251	SRA	29	30	30	30	30	31	31	31	31
Comm-Computer Sys Ops/Cntl Apr	3C031/3C251	A1C	25	25	25	25	26	26	26	26	27
TOTAL			104	105	106	107	108	109	110	111	112

AIR FORCE SPECIALTY TITLE	AFSC	GRADE	MANPOWER REQUIREMENT								
Comm-Computer Sys Eng	033S3C	CPT	1	1	1	1	1	1	1		
Comm-Computer Sys Supt	3C090/3C291	SMS	1	1	1	1	1	1	1		
Comm-Computer Sys Ops/Cntl Crftmn	3C071/3C271	MSG	7	7	7	7	7	7	7		
Comm-Computer Sys Ops/Cntl Jrnymn	3C071/3C271	TSG	18	18	19	19	19	19	19		
Elec Computer & Switch System Crftmn	*2E271	TSG	2	2	2	2	2	2	2		
Elec Computer & Switch System Jrnymn	*2E251	SSG	3	3	3	3	3	3	3		
Comm-Computer Sys Ops/Cntl Jrnymn	3C051/3C251	SSG	22	23	23	23	23	24	24		
Comm-Computer Sys Ops/Cntl Jrnymn	3C051/3C251	SRA	32	32	32	32	33	33	33		
Comm-Computer Sys Ops/Cntl Apr	3C031/3C251	A1C	27	27	27	28	28	28	29		

*AFSC 2E2X1 is only authorized for support of deployable WCS/TBM mission critical computer resources (e.g., Sentinel Byte, Constant Source, WCCS, AFMSS), otherwise replace 2E2X1s in above table with either a 3C0X1 or 3C2X1.

TOTAL			113	114	115	116	117	118	119		

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VARIANCE

A3.1. Title. Positive Mission Variance for Initial Deployable Network Operations.

★**A3.2. Definition.** Air Force wings with a deployable mission will provide resources to support initial network operations for the deployed warfighter. Network controllers will manage core network services, and will provide the network backbone required to support deployed forces. They will manage WAN/LAN gateway interfaces, and interfaces to the host nation communications networks. During nondeployment periods they will be responsible for developing contingency and mobility tasking plans, maintaining a day-to-day mobility capability, and ensuring mobility equipment is operative and properly packaged for deployment. This variance does not support surge or sustainment network requirements. Further guidance on deployed network operations can be found in the BNCC Concept of Operations.

A3.3. Impact. + 321.4 monthly man-hours.

A3.4. Applicability. This variance applies to all BNCCs supporting a deployable network operations mission.

PROCESS ANALYSIS SUMMARY

BASE NETWORK CONTROL CENTER

PROCESS TITLE	MEASURED MAN-HOURS	*PERCENTAGE OF EARNED MAN-HOURS
1. Conducts Base Network Information Protection Operation	321.40 - 803.50	
2. Performs Network Management Operation	799.54	.1306
3. Performs Help Desk Functions	2532.78	.4136
4. Provides Base Network Hardware/ Software Installation Service	355.20	.0580
5. Performs Base C4 Network Management Planning	439.25	.0717
6. Monitors and Optimizes Network Performance	29.71	.0048
7. Performs Network/Circuit Quality Control (QC) Testing and Evaluation	69.81	.0114
8. Provides Network and Small Computer Maintenance Support	399.59	.2285
9. Performs Federal Information Processing (FIP)(ADPE) ECO Duty	277.24	.0453
10. Administers Customer Training Program	157.16	.0257
11. Performs Contract Management for Base Network Support	40.89	.0067
12. Performs Base Network Budget Planning	22.78	.0037

*** VARIANCE INSTRUCTIONS**: BNCCs that do not perform one or more of the above processes must develop a negative variance to adjust earned man-hours, paragraph 4.1.3.

Adjusted man-hours = Earned man-hours from (para 4.1.3.) x (1 - % of earned man-hours), from table above. (i.e., Performs Help Desk Function has been contracted at Base 'A'. Earned man-hours at paragraph 4.1.3. is 3000. Multiply 3000 x (1 - 0.4136) = 1759.2. Enter adjusted man-hours (1759.2) at paragraph 4.1.3. Repeat this procedure for all processes not accomplished by your BNCC.)